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+ DRI ICA TIONI NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,549	06/14/2001	Stuart D. Hellring	1673A1	8272
24959 7590 10/02/2002 PPG INDUSTRIES INC			EXAMI	INER
INTELLECTUAL PROPERTY DEPT ONE PPG PLACE			GOUDREAU,	GEORGE A
PITTSBURGH, PA 15272			ART UNIT	PAPER NUMBER
			1763	5
			DATE MAILED: 10/02/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

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09-882,549	Hellring et al				
George Goudre	au Group Art/Onit				
s on the cover sheet beneath the correspondence address—					
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TO EXPIRE	ONTH(S) FROM THE MAILING DATE				
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ult, expire SIX (6) MONTHS from the atute, cause the application to beco	of thirty (30) days will be considered timely. mailing date of this communication. me ABANDONED (35 U.S.C. § 133). ven if timely, may reduce any earned patent				
to 12-02')(i	e, - Papers # 1-4),				
ot for formal matters, prosecution as to the merits is closed in 35 C.D. 1 1; 453 O.G. 213.					
	is/are pending in the application.				
	is/are withdrawn from consideration.				
	is/are allowed.				
	is/are rejected.				
	is/are objected to.				
	are subject to restriction or election requirement				
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Office Action Summary —Th MAILING DATE of this communication appear P riod for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET 1 OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFF from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, such period shall, by defau - Failure to reply within the set or extended period for reply will, by sta - Any reply received by the Office later than three months after the m term adjustment. See 37 CFR 1.704(b). **Status** Responsive to communication(s) filed on This action is FINAL. ☐ Since this application is in condition for allowance except accordance with the practice under Ex parte Quayle, 193 **Disposition of Claims** Claim(s) Of the above claim(s) ☐ Claim(s) Claim(s) Claim(s) ☐ Claim(s) **Application Papers** ☐ The proposed drawing correction, filed on _ ☐ The drawing(s) filed on _____ __ is/are obje □ The specification is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. Pri rity under 35 U.S.C. § 119 (a)-(d) □ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d). ☐ All ☐ Some* ☐ None of the: ☐ Certified copies of the priority documents have been received. ☐ Certified copies of the priority documents have been received in Application No. _ $\hfill \Box$ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)) *Certified copies not received: Atta hment(s) Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413 Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152 □ Notice of Draftsperson's Pat nt Drawing Revi w, PTO-948 □ Oth r_

Office Action Summary

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15. The following is a quotation of 35 U:S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).
- 17. Claims 1-5, 7-12, and 18-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Persello (5,286,478).

Persello disclose a process, and composition for cmp polishing teeth with a cmp slurry comprised or precipitated silica with the following properties:

- -silica grain diameter of (1-10) microns;
- -15 or less OH groups/ nm2 of surface area;
- -BET of (40-600) m2/gm;
- -CTAB of (4-400) m2/gm; and
- -oil uptake of (80-500) ml/gm

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This is discussed specifically in columns 47-54; and discussed in general in columns 1-54. Persello fails, however, to specifically disclose the following aspects of applicant's claimed invention:

-the specific cmp polishing process parameters which are claimed by the applicant

It would have been prima facie obvious to employ any of a variety of different process conditions in the cmp process taught above including those which are specifically claimed by the applicant. These are all well known variables in the cmp polishing art which are known to effect both the rate and quality of the cmp polishing process. Further, the selection of particular values for these variables would not necessitate any undo experimentation which would be indicative of a showing of unexpected results.

Alternatively, it would have been obvious to one skilled in the art to employ the specific process conditions which are claimed by the applicant in the cmp polishing process taught above based upon In re Aller as cited below.

"Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." <u>In re Aller</u>, 220 F. 2d 454, 105 USPQ 233, 235 (CCPA).

Further, all of the specific process conditions which are claimed by the applicant are results effective variables whose values are known to effect both the rate, and the quality of the cmp polishing process.

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Further, in regards to applicant claim limitation that their silica has a diameter of less than one micron, applicant has failed to distinguish over references which teach silica grains with one micron diameter such as that of Persello based upon the fact that the reference is so close to that of the claim in this regard that it is impossible to distinguish between the reference and applicant's claim in this regard.

- 18. Claims 6, and 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner George A. Goudreau whose telephone number is (703) -308-1915. The examiner can normally be reached on Monday through Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Examiner Gregory Mills, can be reached on (703) -308-1633. The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) -306-3186.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) -308-0661.

George A. Goudreau/gag

Primary Examiner

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